IN THE CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A geographic information transmitting system using a digital broadcasting network, comprising:

a geographic information ~~collecting means for~~ collector configured to receive ~~receiving~~ real-time geographic information and real-time traffic information from a central/local geographic information collecting network;

a geographic information ~~processing means for~~ processor configured to extract and process ~~extracting/processing~~ the received geographic information and real-time traffic information and ~~outputting~~ output whole area information, and geographic information/traffic information for a plurality of resolution levels;

a digital broadcasting ~~means for~~ station configured to ~~converting and transmitting~~ convert and transmit the outputted geographic information/traffic information in conformity to digital broadcast signals;

a geographic information ~~multiplexing means for multiplexing~~ multiplexor configured to multiplex the transmitted geographic information/traffic information with local geographic information data; and

a ~~transmitting means for~~ transmitter configured to ~~transmitting~~ transmit the multiplexed geographic information/traffic information data to a corresponding region.

2. (Currently Amended) The transmitting system as recited in claim 1, wherein the digital broadcasting ~~means~~ station receives the geographic information from the geographic information ~~processing means~~ processor and reestablishes a multiplexing structure of an existing geographic information broadcasting channel to transmit the geographic information to the ~~transmitting means~~ transmitter based on a predetermined standard for map segmentation.

3. (Currently Amended) The transmitting system as recited in claim 2, wherein the digital broadcasting ~~means~~ station multiplexes the map data of a plurality of sizes, which are transmitted from the geographic information ~~processing means~~processor, with the digital broadcast signals based on a map selection standard and a data retransmission period, which is determined according to a frequency of data change, in consideration of broadcasting conditions and the size of the broadcasting data channel and transmits the multiplexed map data to the ~~transmitting means~~transmitter.

4. (Currently Amended) The transmitting system as recited in claim 1, wherein the geographic information ~~processing means~~ processor processes update data as soon as the update data are received and adds the update data to information transmitted to each region by providing a plurality of map data versions which have a different file size based on significance of the geographic information and a level of resolution.

5. (Currently Amended) A geographic information receiving system using a digital broadcasting network, comprising:

a ~~synchronizing means~~ synchronizer configured to select and synchronize ~~for selecting/synchronizing~~ signals transmitted from ~~each transmitter~~a plurality of transmitters;

a ~~demodulating means for~~ demodulator configured to ~~demodulating~~ demodulate the synchronized signals;

a ~~demultiplexing means for demultiplexing~~ demultiplexor configured to demultiplex the demodulated signals;

a data ~~decoding means for decoding~~ decoder configured to decode the demultiplexed signals;

a storing ~~means~~ unit for storing the decoded data;

a map data ~~managing means for managing~~ manager configured to manage the stored decoded data and ~~displaying~~ display a requested part of a map; and

a navigation/display ~~means for~~ unit configured to ~~displaying~~ display map data and ~~performing~~ perform navigation under the control of the map data managing means.

6. (Currently Amended) The receiving system as recited in claim 5, further comprising:

an audio/video ~~controlling means for controlling and outputting~~ controller configured to control audio/video data among the demultiplexed signals.

7. (Currently Amended) The receiving system as recited in claim 5, wherein the map data ~~managing means~~ manager combines the map data stored in the storing ~~means~~ unit at boundary points so that there is no data vacancy, and displays a requested part of the map on the navigation/display ~~means~~unit.

8. (Currently Amended) The receiving system as recited in claim 5, wherein the storing ~~means~~ unit has a sufficient capacity to store map data of at least three regions so as to receive and store map data for all regions that involve in boundary of map segments and stores map segment numbers and location coordinates of a particular point in advance.

9. (Currently Amended) The receiving system as recited in claim 5, wherein once the storing ~~means~~ unit receives map data, the storing ~~means~~ unit stores the map data until the map data exceed a predetermined capacity level and, if a vehicle moves to a new region, the storing ~~means~~ unit stores map data for the new region in the remainder of the storing ~~means~~unit; and

if the map data exceed the predetermined capacity level, the storing ~~means~~ unit deletes the stored map data from the data with the lowest usage frequency.

10. (Previously Presented) A method for transmitting geographic information by using a digital broadcasting network, comprising the steps of:

a) collecting real-time geographic information and real-time traffic information from a central/local geographic information collecting network;

b) extracting/processing local geographic information and local traffic information from the collected geographic information/traffic information and outputting whole area information and geographic information/traffic information for a plurality of resolution levels;

c) converting and transmitting the outputted geographic information/traffic information

data outputted from the step b) in conformity to digital broadcast signals;

d) multiplexing the geographic information/traffic information data transmitted in the step c) with local geographic information data;

e) performing encryption during the multiplexing in the step d) so that whether to allow a user to use the information be determined based on whether the user is a subscriber and what subscriber class the user belongs to; and

f) transmitting the multiplexed geographic information/traffic information data to a corresponding region.

11. (Previously Presented) A method for receiving geographic information by using a digital broadcasting network, comprising the steps of:

a) selecting/synchronizing signals transmitted from a transmitter;

b) demodulating the synchronized signals;

c) demultiplexing the demodulated signals;

d) decoding the demultiplexed signals;

e) performing decryption during the decoding in the step d) by determining whether to allow a user to use the geographic information based on whether the user is a subscriber and what subscriber class the user belongs to;

f) storing the decrypted data;

g) managing the data stored in the step f) by using a map data managing unit and displaying a requested part of a map; and

h) displaying map data and perform navigation under the control of the map data managing unit.